

REMARKS

This correspondence is filed as a response to the Final Office Action dated November 19, 2003. Applicants first note with appreciation the Examiner's continued thorough examination of the application as evidenced in the latest response. Applicants also appreciate the courtesies extended by both the Examiner and the Examiner's supervisor to Applicants counsel in a brief informational call.

With regard to the Office Action, Applicants have amended Claim 6 placing it in independent form. With regard to remaining rejected claims, Applicants believe that these claims as currently presented overcome the rejections raised. Applicants therefore request reconsideration of the claims in light of the following remarks. However, if for some reason, the Examiner disagrees with applicants arguments to one or more of the rejected claims, Applicant authorizes the Examiner to cancel any rejected claims and issue a Notice of Allowance to the allowed claims.

I. Authorization to Cancel Claims If Necessary

As detailed below, Applicants believe that all of the claims of the application are patentable. However, if the Examiner disagrees and continues to reject certain claims, Applicants authorize the Examiner to cancel such claims and issue a Notice of Allowance to the allowed claims.

II. Claim 6

In paragraph 6, the Office Action indicates that dependent Claim 6 would be allowable if rewritten in independent form. Applicants have amended Claim 6 placing it in independent form with all the recitations of Claims 4 and 5. Applicants respectfully submit that Claim 6 is now in condition for allowance.

III. Independent Claim 1 is Patentable

In paragraph 5, the Office Action rejects Claims 1 and 2 under 35 U.S.C. § 103(a) as obvious in light of the combination of U.S. Patent No. 4,987,689 to Kaczmariski and U.S. Patent

No. 6,249,993 to Armstrong. Specifically, the Office Action states that all elements of these claims are taught by the '689 Kaczmariski patent, except for the recitation that the attachment plate carried by the transport machine is oriented at a permanently fixed angle offset from vertical such that the attachment plate faces downwardly. In light of this, the Office Action cites the attachment plate 118 of the '993 Armstrong patent. Specifically, the Office Action argues that the attachment plate 118 is oriented at a permanently fixed angle offset from vertical and that it would have been obvious to one skilled in the art to combine the frame 118 of the '993 Armstrong patent with the apparatus of the '689 Kaczmariski patent. Applicants respectfully disagree.

As background, the digging implement of the claimed invention is configured so as to be low profile. This allows the digging implement of the claimed invention to be placed under an existing structure when used in a digging mode. The issue considered by the Applicants was that if the digging implement was connected directly to the frame of the transport machine, the digging implement would be too high in the air and would not fit under some structures due to the horizontal position of the frame. In other words, the lowest position on the transport machine for attachment may be too vertically high for the implement to fit under existing structures. In order to facilitate the low profile of the claimed invention, Applicants introduced an attachment plate 32. With reference to Figures 3A and 4A, the attachment plate 32 is angled downwardly at a permanently fixed angle offset α from vertical. The attachment plate is used to connect the implement to a frame 30 of the transport machine. The attachment plate attaches the digging implement 10 to the transport machine. By having a downward permanent angle, the digging element 10 has a lower profile than it would if directly attached to the frame of the transport machine. In other words, the digging implement is located in a horizontal plane below that of the horizontal plane where the attachment plate connects to the frame due to the angel offset α of the attachment plate 32.

The Office Action points to the attachment plate 118 of the '993 Armstrong patent and argues that this attachment plate is oriented at a fixed angle offset. Applicants disagree. There is no way that the attachment plate 118 is oriented at a permanently fixed angle offset from perpendicular. If so, the digging implement in the '993 Armstrong patent would not work.

Specifically, the attachment plate 118 is used in the apparatus of the '993 Armstrong patent to move the digging implement vertically up and down. The attachment plate 118 essentially replaces the bucket of the transport device 10. By downwardly urging or tilting the frame during digging, the digging implement is pushed down in the ground for digging. If the attachment plate 118 of the '993 Armstrong patent were not allowed to change angles to different offsets from vertical, the digging implement would not be able to dig down into the ground. It would instead be held at a fixed angle position relative to the ground. Therefore, Applicants submit that there is no way that the attachment plate 118 of the '993 Armstrong patent is oriented at a permanently fixed angle offset from vertical as is recited in independent Claim 1. Further, there is no teaching or suggestion in the reference to this point.

Even if the attachment plate 118 was oriented at a permanently fixed angle offset from vertical, Applicants would still question combinability of the references. Section 2143 of the MPEP states that there must be some teaching or suggestion within the references indicating to one skilled in the art that the references can be combined. Applicants do not find any reason within either the '689 Kaczmariski patent or the '993 Armstrong patent that would suggest use of an attachment plate oriented at a permanently fixed offset angle from vertical. There is nothing in the references discussing the need for low profile digging implements or how such would be achieved. On page 4, the Office Action states that it would have been obvious to combine the references to "allow for movement of the trencher between a plurality of positions." An attachment plate having a fixed angel offset from perpendicular does not allow for movement of the trencher between different positions. The angle is permanently fixed, not moveable. As such, the reasons articulated by the Office Action for such a combination do not meet the reasons for having an attachment plate with a permanently fixed angle offset.

It may be argued that the structure labeled 204 in Figures 2-4 of the '993 Armstrong patent, which is attached to attachment plate 118 is the recited attachment plate of the claim. Applicants would disagree with such an argument if presented. Specifically, there is nothing to teach or suggest that this structure 204 is offset at a permanent angle from vertical. In fact, Figure 4 appears to illustrate that the structure 204 is vertical relative to the attachment plate 118. As such, if the attachment plate 118 is oriented by the user of the transport machine at a vertical

angle position, the structure 204 would also have a vertical angle. It would not angle down in this instance.

In light of the above, Applicants respectfully submit that independent Claim 1, as well as the claims that depend therefrom, is patentable over the cited references.

IV. Independent Claim 4

With regard to Claims 4 and 5, the Office Action rejected these claims under 35 U.S.C. § 103(a) as obvious in light of the combination of U.S. Patent No. 4,941,786 to Steinbock and the '993 Armstrong patent. Specifically, the Office Action argues that the '786 Steinbock patent discloses all aspects of the claims except for the recitation that the attachment plate is oriented at a permanently fixed angle offset from vertical such that the attachment plate faces downwardly. In light of this, the Office Action cites the attachment plate 118 of the '993 Armstrong patent. Specifically, the Office Action alleges that the attachment plate 118 is oriented at a permanently fixed angle offset from vertical and that it would have been obvious to one skilled in the art to combine the frame 118 of the '993 Armstrong patent with the apparatus of the '786 Steinbock patent. Applicants respectfully disagree with these rejections for several reasons.

First, as discussed with regard to Claim 1, the frame 118 of the '993 Armstrong patent is not at a fixed permanent offset angle from vertical, as is recited in Claim 4. Instead, the frame 118 moves through different angular positions in operation. Therefore, the recited combination does not meet this recitation of Claim 4.

Second, Claim 4 recites a frame comprising a pair of widthwise extending rails and at least one strut extending between the pair of rails, wherein the attachment plate is connected to the at least one strut of the frame. Neither of the cited references teaches nor suggests that the attachment plate is connected to the struts of the frame. Both of the attachment plates of the '786 Steinbock patent and the '993 Armstrong patent appear to be attached to the rails of the frame, not the strut.

Third, there is no teaching or suggestion in either of the references that the frame allows the digging implement to be positioned outside the boundaries of the transport machine, as is recited in Claim 4. The '993 Armstrong patent nowhere teaches or suggests that the frame 118

allows the digging implement 100 to be positioned at a lateral offset outside the bounds of the transport machine 10. In fact, as illustrated in Figures Figure 1, the digging implement appears to be located at a fixed position laterally relative to the frame 100. Further, there is no teaching or suggestion that the frame 118 can be positioned at different locations laterally with respect to the transport machine 10. Applicants thus respectfully submit that '993 Armstrong patent does not teach or suggest the recitations of Claim 21.

With regard to the '786 Steinbock patent, the Office Action initially presumes that the implement discussed in the '786 Steinbock patent is connected to a transport machine that is not shown. Applicants disagree with this presumption. There is nothing in the '786 Steinbock patent to teach or suggest that the implement disclosed is connected to a transport machine. Specifically, in the background, the '786 Steinbock patent states that the "invention relates to an excavator having mounted implements attached to the rear side thereof . . . such as a bucket, grab and drilling, milling, or hoeing devices and the like." See col. 1, lines 5-8. Further, the title of the invention is an excavator. Throughout the specification, the excavator is referred to as the implement illustrated in Figure 1. There is no discussion whatsoever concerning attachment of the frame 1-4 to a transport machine as is recited in independent Claim 4. In fact there does not appear to be any means of attachment illustrated on the frame 1-4 for attaching it to a transport machine. The only indication is the loops appearing at the stops of vertical members 1. These hooks are not discussed in the specification, and any suggestion of their function would be speculative at best. For all Applicants know, the excavator may be placed at fixed position by a crane or other unloading device.

Applicants submit that not only is attachment to a transport machine not taught by the '786 Steinbock patent, it is also not suggested by the reference, as there is no discussion of its attachment to a transport machine and no illustrated means for connecting it to a transport machine.

Notwithstanding the above, even if it can be argued that a transport machine is implied, there is nothing in the '786 Steinbock patent to teach or suggest that the frame 1-4 of the '786 Steinbock patent can be connected to the transport machine such that a center-line of the digging implement is capable of being laterally offset from the lengthwise extending axis to a position

beyond the respective lateral bounding planes of the transport machine as is recited in independent Claim 4. Specifically, independent Claim 4 requires that the frame allow the digging implement to be offset from center and beyond the lateral bounding planes of the transport machine. As the '786 Steinbock patent does not disclose a transport machine at all, there is no way to discern whether the digging implementing can extend past the outer boundaries of the transport machine. Applicants have no idea how wide that transport machine would be and respectfully submits that it would only be speculation as to whether the digging implement extends passed the transport machines outside boundary. There is no teaching or suggestion in the '786 Steinbock patent on this point.

Finally, Applicants do not believe that there is adequate teaching or suggestion for combining the '993 Armstrong and '786 Steinbock patents. On page 6, the Office Action alleges that the combination would have been obvious "to include the attachment plate of Armstrong on the implement of Steinbock in order to provide a one of a plurality of connecting means." First, as mentioned above, there is no teaching or suggestion that the implement in the '786 Steinbock patent is attached to a transport machine. Further, even if the '786 Steinbock patent did disclose connection to a transport machine, the reasons for combining the references outlined in the Office Action do not rise to a level of prima facie obvious as outlined in § 2143 of the MPEP. The mere fact that one could replace an attachment means in one reference with that of another is not a motivation to do so. In order to make such a combination, there must be a motivation in either of the references to make such a combination. In other words, there would need to be some teaching or suggestion in either the '993 Armstrong patent or the '786 Steinbock patent to motivate one skilled in the art to make the combination. Applicants do not find any such motivation. There is nothing in either reference suggesting the benefits of the attachment plate of the '993 Armstrong patent or why it would be good to use such a plate in the '786 Steinbock apparatus.

In light of the above, Applicants respectfully submit that independent Claim 4, as well as the claims that depend therefrom, is patentable over the cited references.

V. Independent Claim 21 is Patentable

With regard to the rejection of Claim 21, the Office Action is somewhat confusing. In paragraph 2, the Office Action begins by stating that independent Claim 21 is anticipated by U.S. Patent No. 6,249,993 to Armstrong. However, in the next paragraph, the Office Action compares the claim to U.S. Patent No. 4,941,786 to Steinbock. As such, it is unclear which reference is being cited against the Claim 21. Applicants assume that both references are alternatively being cited against Claim 21. However, Applicants respectfully submit that neither of these references teach or suggest all of the recitations of independent Claim 21.

With regard to the '993 Armstrong patent, independent Claim 21 recites a frame for operable connection to a transport machine that frame is connected to the transport machine such that allows a center-line of the digging implement to laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding planes of the transport machine. The '993 Armstrong patent nowhere teaches or suggests that the frame 118 allows the digging implement 100 to be positioned at a lateral offset outside the bounds of the transport machine 10. In fact, as illustrated in Figures Figure 1, the digging implement appears to located at a fixed position laterally relative to the frame 100. Further, there is no teaching or suggestion that the frame 118 can be position at different locations laterally with respect to the transport machine 10. Applicants thus respectfully submit that '993 Armstrong patent does not teach or suggest the recitations of Claim 21.

With regard to the '786 Steinbock patent, Applicants note that several of the recitations of independent Claim 21 are not taught or suggested by this reference. For example, the Office Action initially presumes that the implement discussed in the '786 Steinbock patent is connected to a transport machine that is not shown. Applicants disagree with this presumption. There is nothing in the '786 Steinbock patent to teach or suggest that the implement disclosed is connected to a transport machine. Specifically, in the background, the '786 Steinbock patent that the "invention relates to an excavator having mounted implements attached to the rear side thereof . . . such as a bucket, grab and drilling, milling, or hoeing devices and the like." See col. 1, lines 5-8. Further, the title of the invention is an excavator. Throughout the specification, the

excavator is referred to as the implement illustrated in Figure 1. There is no discussion whatsoever concerning attachment of the frame 1-4 to a transport machine as is recited in independent Claim 21. In fact there does not appear to be any means of attachment illustrated on the frame 1-4 for attaching it to a transport machine. The only indication is the loops appearing at the stops of vertical members 1. These hooks are not discussed in the specification, and any suggestion of their function would be speculative at best. For all Applicants know, the excavator may be placed at fixed position by a crane or other unloading device.

Applicants submit that not only is attachment to a transport machine not taught by the '786 Steinbock patent, it is also not suggested by the reference, as there is no discussion of its attachment to a transport machine and no illustrated means for connecting it to a transport machine.

Notwithstanding the above, even if it can be argued that a transport machine is implied, there is nothing in the '786 Steinbock patent to teach or suggest that the frame 1-4 of the '786 Steinbock patent can be connected to the transport machine such that a center-line of the digging implement is capable of being laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding planes of the transport machine as is recited in independent Claim 21. Specifically, independent Claim 21 requires that the frame allow the digging implement to be offset from center and beyond the lateral bounding planes of the transport machine. As the '786 Steinbock patent does not disclose a transport machine at all, there is no way to discern whether the digging implement can extend past the outer boundaries of the transport machine. Applicants have no idea how wide that transport machine would be and respectfully submit that it would only be speculation as to whether the digging implement extends beyond the transport machine's outside boundary. There is no teaching or suggestion in the '786 Steinbock patent on this point.

In light of the above, Applicants respectfully submit that independent Claim 21 is patentable over the cited references.

Conclusion

In view of the amended claim and remarks presented above, it is respectfully submitted that all of the present claims of the application are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

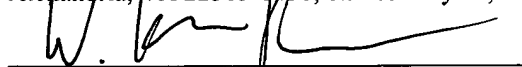


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